26. (new) The method of claim 22, wherein said antagonist of STAT DNA binding is a peptide comprising the sequence of SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, or SEQ ID NO: 16.

27. (new) The method of claim 23, wherein said antagonist of STAT DNA binding is a peptide comprising the sequence of SEQ ID NO: 17, SEQ ID NO: 18, or SEQ ID NO: 19.

## REMARKS

Claims 1 to 18 are currently pending in the instant application. Claim 1 has been amended to clarify that which Applicants regard as the invention. Claims 3 to 18 have been canceled without prejudice and new claims 19 to 27 are added to more particularly point out and distinctly claim that which Applicants regard as the invention. Applicants reserve the right to pursue the subject matter of the canceled claims in a related application. Thus, upon entry of the above amendments, Claims 1, 2, and 19 to 27 will be pending. A marked version of the claims indicating the changes to the claims is attached hereto as Appendix A. A copy of all pending claims is attached hereto as Appendix B. The new claims are fully supported by the present specification. For example, claims 19, 23, 24, and 27 are supported at page 2, lines 9 to 11, Example 13 at pages 58 to 65, and Table 2 at page 64; claim 20 is supported at page 30, lines 6 to 8; claim 21 is supported at page 6, lines 16 to 21; claims 22 and 26 are supported at Example 13 at pages 58 to 65, and Table 1 at page 63; and claim 25 is supported at Example 13 at pages 58 to 65, and Table 3 at pages 64 and 65. No new matter is introduced by the amended or new claims.

## Restriction Requirement Under 35 U.S.C. § 121

The Examiner has required an election under 35 U.S.C. § 121 of one of the following inventions:

I. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an inhibitor of STAT dimerization;

II. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an inhibitor of Jak;

III. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an inhibitor of Src;

IV. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an inhibitor of BCR-Abl;

V. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of SH2-pY interaction;

VI. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient a dominant negative STAT protein;

VII. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of the DNA binding activity of STAT;

VIII. Claims 1-5 and 12-14, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient a tyrphostin inhibitor;

IX. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of transactivation of a gene by STAT;

X. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of IL-6 receptor activation;

XI. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of a cytokine;

XII. Claims 1-5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of a growth factor;

XIII. Claim 6, drawn to a method for inhibiting neoplastic transformation of a cell of a subject, wherein said method comprises administering to said patient an antagonist of STAT3 activation;

XIV. Claim 7, drawn to method for increasing the efficiency of a chemotherapeutic agent, wherein said method comprises administering to a patient an antagonist of STAT3 activation;

XV. Claim 8, drawn to a method for increasing the efficiency of radiation therapy, wherein said method comprises administering to a patient an antagonist of STAT3 activation;

XVI. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an inhibitor of STAT dimerization and electroporating said tumor;

XVII. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an inhibitor of STAT tyrosine phosphorylation and electroporating said tumor;

XVIII. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an antagonist of SH2-pY binding and electroporating said tumor;

XIX. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an antagonist of the DNA binding activity of STAT and electroporating said tumor;

XX. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with a tyrphostin inhibitor and electroporating said tumor;

XXI. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an antagonist of transactivation of a gene by STAT and electroporating said tumor;

XXII. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an antagonist of IL-6 receptor activation and electroporating said tumor;

XXIII. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an antagonist of a cytokine and electroporating said tumor;

XXIV. Claim 9, insofar as the claim is drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with an antagonist of a growth factor and electroporating said tumor;

XXV. Claims 10 and 11, drawn to a method for inducing apoptosis in the cells of a solid tumor, wherein said method comprises contacting said tumor with a DNA construct comprising a polynucleotide sequence encoding a dominant-negative variant of STAT3;

XXVI. Claims 15-17, drawn to a cell line, classified in class 435, subclass 326; and

XXVII. Claim 18, drawn to a method for screening compounds.

The Examiner contends that each of Groups I-XXVII is distinct from the other Groups.

In response, Applicants elect without traverse the invention of Group VII, claims 1 to 5, insofar as the claims are drawn to a method for inhibiting the growth of cancer cells in a patient, wherein said method comprises administering to said patient an antagonist of the DNA binding activity of STAT. Claims directed to non-elected groups have been canceled without prejudice to Applicants' right to pursue the subject matter of the canceled claims in related applications. New claims 19 to 27 are believed to be within elected Group VII.

Attorneys for Applicants retain the right to petition from the restriction requirement under 37 C.F.R. § 1.144.

## CONCLUSION

Applicants respectfully request that the present amendments and remarks be made of record in the instant application. An early allowance of the application is earnestly requested. If any issues remain in connection herewith, the Examiner is respectfully invited to telephone the undersigned to discuss the same.

Respectfully submitted,

Date: November 4, 2002

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**APPENDIX A**
**MARKED VERSION OF AMENDED CLAIMS**
**U.S. PATENT APPLICATION SERIAL NO. 09/492,764**

1. A method of inhibiting growth of cancer cells in a patient, comprising: administering to said patient an effective amount of an antagonist of STAT (signal transducer and activator of transcription) signaling, wherein said antagonist is [an antagonist of STAT dimerization, an inhibitor of a tyrosine kinase capable of phosphorylating STAT, an antagonist of SH2-pY interactions, a dominant negative STAT protein,] an antagonist of STAT DNA binding[, a tyrphostin inhibitor, an antagonist of STAT-dependent gene transactivation, an antagonist of IL-6 receptor activation, an antagonist of a cytokine that constitutively activates STAT, an antagonist of a growth factor that constitutively activates STAT, or mixtures thereof in a pharmaceutically acceptable carrier].

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**APPENDIX B**
**PENDING CLAIMS AS OF NOVEMBER 4, 2002**
**U.S. PATENT APPLICATION SERIAL NO. 09/492,764**

1. A method of inhibiting growth of cancer cells in a patient, comprising: administering to said patient an effective amount of an antagonist of STAT (signal transducer and activator of transcription) signaling, wherein said antagonist is an antagonist of STAT DNA binding.

19. The method of claim 1, wherein said antagonist of DNA binding disrupts SH2-pY interactions.

20. The method of claim 1, wherein said antagonist of DNA binding is an antibody.

21. The method of claim 1, wherein said antagonist of DNA binding is a peptide.

22. The method of claim 21, wherein said antagonist of DNA binding is a peptide that binds to full-length STAT3.

23. The method of claim 21, wherein said antagonist of DNA binding is a peptide that binds the SH2 domain of STAT3.

24. The method of claim 21, wherein said antagonist of DNA binding is a peptide that disrupts SH2-pY interactions.

25. The method of claim 21, wherein said antagonist of DNA binding is a peptide comprising the sequence of SEQ ID NO: 20, SEQ ID NO: 22, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 37, or SEQ ID NO: 38.

26. The method of claim 22, wherein said antagonist of DNA binding is a peptide comprising the sequence of SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, or SEQ ID NO: 16.

27. The method of claim 23, wherein said antagonist of DNA binding is a peptide comprising the sequence of SEQ ID NO: 17, SEQ ID NO: 18, or SEQ ID NO: 19.